CURRICULUM VITAE

Adrian Mario Senderowicz, M.D

Mailing address: 30 Convent Dr

Bldg 30, Rm. 211 Bethesda, MD 20892 Phone: (301) 594-5270 fax :(301) 402-0823

email: sendero@helix.nih.gov

Citizenship: USA

Education:

School of Medicine

Universidad de Buenos Aires Buenos Aires, Argentina

Medical Doctor 1982-1987

Academical Position

Investigator and Chief Molecular Therapeutics Unit Oral Pharyngeal Cancer Branch National Institute of Dental and Craniofacial Research National Institutes of Health July 2000-present

Attending Physician Medical Oncology Clinical Research Unit Center for Cancer Research National Cancer Institute July 1997-present

Clinical Investigator Developmental Therapeutics Program Clinical Trials Unit National Cancer Institute Bethesda, Maryland July 1996-present

Coordinator Developmental Therapeutics Program Clinical Trials Unit National Cancer Institute Bethesda, Maryland July 1996-March 2000 Coordinator
Prostate Cancer Drug Development Clinic
Clinical Pharmacology Branch
Division of Clinical Sciences
National Cancer Institute
Bethesda, Maryland
January 1996-July 1996

Postgraduate Clinical Fellowship

Clinical Oncology Fellow Medicine Branch National Cancer Institute National Institutes of Health Bethesda, Maryland 1992-1995

Postgraduate Medical Residence

Internal Medicine Residency Mount Sinai School of Medicine Program A New York, New York Department of Internal Medicine 1990-1992 (PGY 2 & 3)

Medical Internship Booth Memorial Medical Center Program New York (Flushing), New York Department of Internal Medicine 1989-1990 (PGY-I)

Postdoctoral Research Fellow

St. Luke's Roosevelt Hospital
Department of Infectious Diseases
New York, New York
Activities: Clinical Immunology in AIDS Pts.
Supervisor: Michael Lange, M.D.
March 1988-July 1989

Instructor of Pharmacology

School of Medicine, University of Buenos Aires Buenos Aires, Argentina March 1986 - December 1987

Board Certification:

ECFMG Certification

1987

FLEX Examination	1988
Diplomate, American Board of Internal Medicine	1992
Diplomate, American Board of Internal Medicine,	
Medical Oncology	1995

Uniformed Service

1996-2000 US Public Health Service (0-4, Lieutenant Commander)

Honors and Awards:

July 1999 US Public Health Service

Commendation Medal

January 1998 US Public Health Service

Bicentennial Unit Commendation

May 1994 American Society of Clinical Oncology

Merit award Dallas, Texas

April 1994 American Association for Cancer Research

Merit award

San Francisco, California

December 1987 Medical doctor degree

Diploma with Honors (Cum Laude)

February 1987-May 1987

Department of Physiology, School of Medicine

University of Buenos Aires. Argentina

Project: "in vitro effects of mitoxantrone in guinea pig atria"

License

New York State #189465-1 Massachusetts (inactive)

Professional Membership and Associations:

American College of Physicians

American Society of Clinical Oncology American Association for Cancer Research

American Association for Advancement of Science

Founder Member

International Society for Translational Research

Buenos Aires, Argentina

Journal Ad hoc Reviewer

Journal of the National Cancer Institute

Cancer Research

International Journal of Cancer

Journal of Clinical Oncology

Leukemia

Life Sciences

Investigational New drugs

Cancer Chemotherapy and Pharmacology

Journal of Biological Chemistry

Oncogene

The Oncologist

The American Journal of Medical Sciences

Annals of Oncology

Cancer Letters

Cancer

Journal of Cellular Biochemistry

Molecular Cell

Editorial Board

Clinical Cancer Research The Women's Review Oncology Review Investigational New Drugs

Meeting Chairperson

October 5-6th, 2000, First Meeting of Novel Molecular Targets for Cancer Therapy, Buenos Aires, Argentina (Chairperson)

October 4-5th, 2001, Second Meeting of Novel Molecular Targets for Cancer Therapy, Buenos Aires, Argentina (Chairperson).

October 3-4th, 2002, Cell Cycle as a Target in Chemoprevention and Cancer Therapy Conference, Austin, Texas, US (Chairperson).

Session Chairperson

March 9th, 2001. Chairperson, First International "North Adriatic Sea" Symposium on Novel Targets for cancer Therapy. "Novel cdk inhibitors for cancer therapy". Trieste, Italy.

April 18th, 2002. Chairperson, Second International "North Adriatic Sea" Symposium on Novel Targets for cancer Therapy. Anti-signaling new drugs: their correct use in clinical setting. Ravenna, Italy

Invited Grant Reviewer

Technical Evaluation Panel, MAO RFP NCI-CN-15000-46, Phase II Clinical Studies of Chemopreventive Agents, Division of Cancer Prevention, NCI (August 2001)

Research services:

1997-present: Preceptor, Howard Hughes Research Scholars

1998-present: Member, Reviewing council, FONCYT, Argentina

1998-present: Chairperson, Head and Neck Cancer Interest Group, NIH.

2000-present: Preceptor, The NIH Academy Program

Protocols as Protocol Chairman

Clinical Center, NCI, NIH

NCI-MB 346 "A phase I trial of continuous infusion flavopiridol in patients with refractory neoplasms"

NCI-MB 379 "A phase I trial of continuous infusion UCN0-1 in patients with refractory neoplasms"

NCI-MB 410 "A phase I trial of oral Perifosine with different loading schedules in patients with refractory neoplasms"

Protocols as Principal Investigator

Clinical Center, NCI, NIH

NCI-MB 394: "A Phase I trial of daily bolus flavopiridol bolus for five consecutive days in patients with refractory neoplasms"

NCI-MB 401: "A Phase II trial of daily bolus flavopiridol bolus for five consecutive days in patients with refractory Head and Neck neoplasms"

Postgraduate Courses

1)Statistics for Biomedical Scientists (STAT 500) FAES/NIH, 8/93-6/94

2)Core Curriculum in Clinical Research Clinical Center, National Institutes of Health, 4/95-6/95

Recent invited Lectures and presentations

- . April 1994, UC Santa Cruz, CA. Mechanism of action of jasplakinolide.
- . September 17-18, 1996. NCI/CTEP Phase I Meeting, Bethesda, MD. Flavopiridol Phase I trial interim results.
- . May 30-31, 1996. Santiago de Chile, Chile. Drug development in Cancer Chemotherapy. Molecular Pathology and Treatment of Gastrointestinal Tumors International Workshop.

- March 10 1997, NCI/CTEP Phase I Meeting, Bethesda, MD.. Flavopiridol Phase I trial interim results.
- . April 15, 1997, UCSD Medical Center, CA. Gastrointestinal/Surgery Grand Rounds, "A Phase I trial of flavopiridol, a novel cyclin-dependent kinase inhibitor, in patients with refractory neoplasms"
- . June 11, 1997, National Institute of Dental Research, Director's Lecture, National Institutes of Health., Bethesda, MD.
- . July 2, 1997, National Institutes of Health, Clinical Center Grand Rounds, Bethesda, MD. "Bench to Bedside. Flavopiridol: a Cyclin-dependent Kinase Inhibitor in Early Clinical Trials".
- . October 30, 1997, Laboratory of Molecular Pharmacology. Division of Basic Sciences, National Cancer Institute . "Preclinical and clinical studies with flavopiridol and UCN-01".
- . April 1998, SWOG Head and Neck Committee, Atlanta, Ga. "Antitumor activity of flavopiridol in Head and Neck xenografts".
- . May 1998, Mitotix, Boston, MA. "Clinical development of flavopiridol".
- . June 15, 1998. University of Vienna, Vienna, Austria, Grand rounds. "Novel cyclin-dependent kinase inhibitors, flavopiridol and UCN-01, in human clinical trials".
- . June 27, 1998. Annual CALGB Meeting (Plenary Session), Fort Lauderdale, Fl, "Clinical Development of Cyclin-Dependent Kinase Inhibitors".
- . July 23, 1998. Investigator's meeting, Hoechst Marion Roussell, Bridgewater, NJ" "Antitumor activity of flavopiridol in Head and Neck xenografts".
- . September 15, 1998, CTEP Phase I Meeting, NCI, NIH, Gaithesburg, MD " Phase I trial of infusional UCN-01 in patients with refractory neoplasms" $\,$
- . November 3, 1998. 5th UICC workshop on Targeted Cancer Therapy, Hamilton, Bermuda. "Early clinical trials with cyclin dependent kinase inhibitors"
- . January 27, 1999. MD Anderson Cancer Center, Houston, Texas, Grand Rounds" Cyclin dependent kinase inhibitors as chemopreventive agents"
- . February 3, 1999. Mount Sinai School of Medicine, NY, NY. Novel cyclin-dependent kinase inhibitors in early human clinical trials".
- . April 20, 1999. Seminars in Clinical and Molecular Oncology, Division of Clinical Sciences, National Cancer Institute, National Institutes of Health, Bethesda, MD. "Cell cycle machinery as Target for Cancer Therapeutics".

- . April 22, 1999. Medical Oncology Grand rounds, Mc. Gill University, Montreal, Canada. "Inhibitors of cyclin-dependent kinases as anticancer drugs".
- . April 28, 1999, Oral Pharyngeal Carcinoma Branch, National Institutes of Dental and Craniofacial and Disorders, National Institutes of Health, Bethesda, MD. ". "Inhibitors of cyclin-dependent kinases as anticancer drugs".
- . May 26, 1999, Seminar, Cell biology Department, Harvard Medical School, Boston, MA, "flavopiridol-induced G_1 arrest is mediated by depletion of cyclin D1 with concomitant loss of cdk6 activity in breast cell lines".
- . June 13, 1999. ECOG Group Meeting, Spring 1999, Head and Neck committee "Flavopiridol: clinical and pre-clinical development in Head and Neck Cancer". Baltimore, MD
- . June 24, 1999. Seminar, Institute for Experimental Pathology, University of Vienna, Vienna, Austria, "UCN-01: a protein kinase inhibitor with unique antitumor/pharmacological properties"
- . June 24, 1999, Early EORTC Drug Development Meeting, Vienna, Austria. "Clinical Development of cyclin-dependent kinase inhibitors in cancer therapeutics"
- . September 28, 1999, CTEP Phase I Meeting, NCI, NIH, Bethesda, MD "Phase I trial of bolus flavopiridol in patients with refractory neoplasms
- . October 7, 1999, Cancer Immunotherapy Symposium, School of Medicine, University of Buenos Aires, Argentina. "Signal transduction pathways in T lymphocytes"
- . October 8, 1999, Seminar, School of Biology, University of Buenos Aires, Buenos Aires, Argentina. "Basic aspects of cell cycle inhibitors"
- . October 15, 1999. VI Breast Cancer Latin American Congress, Isla Margarita, Venezuela. "Novel agents in the treatment of metastatic breast cancer"
- . November 5, 1999. Seminar, Medicine Branch, Division of Clinical Sciences, National Cancer Institute, Bethesda, MD. "Cyclin-dependent kinases as targets for cancer chemotherapy".
- . December 9, 1999, 41st Annual Meeting of the American Society of Hematology, Educational Session: speaker, New Orleans: "Cell cycle regulation as a therapeutic target"
- . January 13, 2000, Seminar, National Cancer Center Research Institute, Tokyo, Japan. "Cyclin-dependent kinases as targets for cancer therapy".
- . January 14, 2000. Seminar, Kyowa Hakko Kogyo Co. Ltd, Tokyo, Japan. "Preclinical development of UCN-01 and flavopiridol".

- . January 15, 2000, Seminar, The International symposium on HMR 1275, Palace Hotel, Tokyo, Japan, "Preclinical and clinical development of flavopiridol".
- . February 23, 2000, Seminar, Thomas Jefferson University, Philadelphia, PA. "Novel cyclin-dependent kinases for cancer Therapy"
- . February 26, 2000, Symposium, A new era in Oncology-Aventis Pharma Germany, Palais des Congres, Strausburg, France. "Flavopiridol: New perspectives in hematology and oncology".
- . February 29, 2000, Seminar: "Preclinical and clinical development of the two novel cyclin-dependent kinase inhibitors, flavopiridol and UCN-01", Dept. of Pathology, Technical University of Munich, Munich, Germany.
- . March 24, 2000, Seminar: "Preclinical and clinical development of the two novel cyclin-dependent kinase inhibitors, flavopiridol and UCN-01". Bristol Myers Squibb Global Headquarters, NY, NY.
- . April 19, 2000, Symposium: "Novel agents in the treatment of Non-Hodgkin's lymphoma". European School of Oncology, Buenos Aires, Argentina.
- . April 28, 2000, Symposium, First European Spring Oncology Conference, Marbella, Spain. "Flavopiridol, the first cyclin-dependent kinase inhibitor in human clinical trials
- . July 7, 2000, Seminar, Holy Cross Hospital, Silver Spring, MD, "Novel agents for the treatment of advanced Head and Neck neoplasms".
- . July 19, 2000, Grand Rounds, National Cancer Institute, Mexico, DF, "Preclinical and clinical development of cdk inhibitors for the treatment of head and neck cancer"
- . September 26, 2000. Grand Rounds, Department of Pathology, NYU, NY, NY. "cyclin-dependent kinase modulators for cancer therapy"
- . September 27, 2000. Seminar, OPCB, DIR, NIDCR, NIH, Bethesda, MD "Cell cycle as the target for Head and neck cancer therapeutics"
- . September, 29, 2000, ENT Grand Rounds, George Washington University, Bethesda, MD: Cyclin-dependent kinase modulators for the treatment of squamous head and neck cancer
- . October 5, 2000, Chairperson, Symposium, "Novel Molecular Targets for Cancer Therapy" Buenos Aires, Argentina, Seminar: novel cyclin-dependent kinase inhibitors for cancer therapy

- . October 6, 2000, Chairperson, Symposium Novel Molecular Targets for Cancer Therapy" . Buenos Aires, Argentina. Seminar: "Novel modalities and targets for the treatment of head and neck cancer", Buenos Aires, Argentina
- . October, 30: Seminar, HIV and AIDS Malignancy Branch, Division of Clinical Sciences, National Cancer Institute, Bethesda, MD. "Flavopiridol: a novel antitumor cyclin-dependent kinase inhibitor that inhibits P-TEF-b and HIV replication"
- . November 9, 2000. Plenary Session, 11th NCI-EORTC-AACR Symposium on New Drugs in Cancer Therapy. Preclinical and clinical development of cyclin-dependent kinase modulators flavopiridol and UCN-01, Amsterdam, Netherlands.
- . November 18, 2000. Seminar. ECOG Group Meeting, Fall 2001, Head and Neck committee. "Development of cyclin-dependent kinase modulators in the treatment of Head and Neck Cancer", Miami, Fl.
- . December 5, 2000. Seminar, NIH Academy, NIH, Bethesda, MD. "Cyclin-dependent kinase modulators: from the bench to the bedside"
- . January 31^{st} , 2001. Grand Rounds, VA Washington Hospital, DC "Cyclin-dependent kinase modulators for the treatment of head and neck neoplasms"
- . March 9th, 2001. Speaker, First International "North Adriatic Sea" Symposium on Novel Targets for cancer Therapy. "Novel cdk inhibitors for cancer therapy". Trieste, Italy.
- . April 11th, 2001. Keynote Speaker. University of Central Florida. "Impact of the sequence of human genome of novel therapeutics". Orlando, Florida
- . May 8th, 2001. Internal Medicine Grand Rounds, Cornell University, New York Hospital. Cyclin-dependent kinase inhibitors for cancer therapy", New York, New York
- . June 4^{th} , 2001 . Internal Medicine Grand Rounds, Fred Hutchinson Cancer Research Center, "Development cyclin-dependent kinase inhibitors for cancer therapy", Seattle, WA
- . August 28^{th} , 2001. Seminar, MD Anderson Cancer Center, Smithville, Texas, "Novel Cyclin dependent kinase inhibitors as chemopreventive agents"
- . October 4, 2001, Chairperson, Symposium, "Second Novel Molecular Targets for Cancer Therapy" Buenos Aires, Argentina, Seminar: novel cyclin-dependent kinase inhibitors for cancer therapy
- . October 5, 2001, Chairperson, Symposium, "Second Novel Molecular Targets for Cancer Therapy" . Buenos Aires, Argentina. Seminar: "Novel modalities and targets for the treatment of head and neck cancer" , Buenos Aires, Argentina.

- . October 10th, 2001. Seminar. AstraZeneca Cancer Research Colloquium, Boston, MA: "Clinical development of cyclin-dependent kinase inhibitors".
- . February 1st, 2002. Seminar. Department of Pathology, Uniformed Services University of the Health Sciences. "Preclinical and Clinical Development of cyclin-dependent kinase inhibitors".
- . April 12th, 2002. Speaker. Annual Meeting for the American Chemical Society. "Clinical trials with cyclin-dependent kinase inhibitors". Orlando, Florida
- . April 18th, 2002. Chairperson and speaker, Second International "North Adriatic Sea" Symposium on Novel Targets for cancer Therapy. Anti-signaling new drugs: their correct use in clinical setting. Ravenna, Italy.
- . June 14th, 2002. Speaker. Second European Spring Oncology Conference (ESOC-2) Marbella, Spain. . "Preclinical and Clinical Development of cyclin-dependent kinase inhibitors".
- . June 21st, 2002. Speaker. Pfizer State of the Art Forum: Oncology , NY, NY. "Novel clinical developments with cyclin-dependent kinase inhibitors".
- . June 29th, 2002. Speaker. 3rd International Lung Cancer Congress, Hawai, USA. "Clinical Development of cyclin-dependent kinase inhibitors in lung cancer".
- . July 22ndth, 2002. Speaker. Gordon Research Conference (Mechanisms of Toxicity). Bates College, Lewiston, Maine. "Preclinical and Clinical Development of cyclin-dependent kinase inhibitors".
- . July 26th, 2002. Speaker. First Interamerican Breast Cancer Conference, Cancun, Mexico. "Clinical Development of cyclin-dependent kinase inhibitors in breast cancer".
- . September 20^{th} , 2002, Speaker, Seminar, Epithelial Damage, Repair and Tissue Engineering (CIEMAT), Madrid, Spain. "Transcriptional upregulation of p21^{waf1} cdk inhibitor by alkylphospholipids".
- . September 25th, 2002. Speaker, 1st International Symposium on Signal Transduction Modulators in Cancer Therapy, Amsterdam, Netherlands "Preclinical and Clinical Development of cyclin-dependent kinase inhibitors".

Publications

1) **Senderowicz, A**; Lange,M.; Inada Y.; Watanabe, K. et al. C5b-9, Bb, C3a des Arg activation is a sensitive indicator of HIV infection; Complement and Inflammation 1989; 6:399.

- 2) Watanabe, K; Inada, Y.; Ikegami, H.; **Senderowicz, A.** et al. In vitro Immunomodulatory effects of traditional Kampo Medicine (SST) on peripheral mononuclear cells from patients with HIV Infection. International Journal of Oriental Medicine 1990; 15: 1-9.
- 3) Viniegra, M., Marchetti, M., Losso, M., **Senderowicz, A,** Politi, P et al. Cardiovascular autonomic function in anthracycline-treated breast cancer patients. Cancer Chemother Pharmacology 1990; 26 (3):227-231.
- 4) Bubb, M, **Senderowicz, A**, Sausville, E, Duncan, K and Korn, E. Jasplakinolide, a cytotoxic natural product, induces actin polymerization and competitively inhibits the binding of Phalloidin to F-actin. J. Biol. Chem 1994 (269):14869-14871.
- 5) **Senderowicz, A**, Kaur, G, Sainz, E et al. Jasplakinolide inhibition of prostate carcinoma cell growth *in vitro* with disruption of the actin cytoskeleton. J Natl Canc Inst 1995(87):46-51.
- 6) Sausville, EA, Duncan, K, **Senderowicz, A.**, Plowman, J, Randazzo, P, Kahn, R, Malspeis, L, Grever, M. Antiproliferative effect in vitro and antitumor activity in vivo of Brefeldin A. Cancer J Sci Am. 1996 Jan;2(1):52.-58
- 7) Figg, W, Dawson, N, Middleman, M, Brawley, O, Lush, R, **Senderowicz, A**, Reed, E, and Sartor, O. Flutamide withdrawal and concomitant initiation of aminogluthetimide in patients with "hormone refractory" prostate cancer. Acta Oncologica 1996 (35):763-765.
- 8) Stone, M, Sausville, E, Fay, J, Headlee, D, Collins, R, Figg, W, Stetler-Stevenson, M, Jain, V, Jaffe, E, Solomon, D, Lush, R, **Senderowicz**, **A** et al. A Phase I study of Bolus versus Continuous infusion of the Anti-CD19 Immunotoxin, IGG-HD37-dgA in patients with B cell Lymphoma. Blood 1996 (88), 1188-1197.
- 9) Sedlacek, H, Czech, J, Naik, R, Kaur, G, Worland, P, Losiewicz, M, Parker, B, Carlson, B, Smith, A, **Senderowicz, A.M**, Sausville, EA. Flavopiridol (L86-8275; NSC 649890), a new kinase inhibitor for tumor therapy. International Journal of Oncology 1996 (9):1143-1168.
- 10) Dawson, N, Figg, W, Cooper, M, Sartor, O, Bergan, R, **Senderowicz, A.M** et al. A phase II trial of suramin, leuprolide and flutamide in previously untreated metastatic prostate cancer. J Clin Oncol 1997 (15): 1470-1477.
- 11) **Senderowicz, A.M**, Vitetta, E, Headlee, D, Ghetie, V, Figg, W.M, et al. Complete sustained response of refractory post-transplant large-B cell lymphoma to an anti-CD22 immunotoxin. Annals of Internal Medicine 1997 (126): 882-5.
- 12) Katz, R L, Quezado, M, **Senderowicz, AM,** Villalba, ML, Laskin WM, Tsokos, M. An intraabdominal small round cell neoplasm with features of primitive neuroectodermal tumor and desmoplastic round cell tumor and a EWS/FLI-1 fusion transcript. Human Pathology 1997 (28): 502-509.

- 13) Dawson, N, Figg, W, Brawley, O, Bergan, R, Cooper, M, **Senderowicz, A.M.** et al. Phase II study of suramin plus aminoglutethimide in two cohorts of patients with androgen-independent prostate cancer: simultaneous antiandrogen withdrawal and prior antiandrogen withdrawal. Clin Cancer Res 1998 (4): 37-44.
- 14) Parker, B, Kaur, G., Nieves-Neira, Taimi, M, W, Kolhagen, G, Shimizu, T, Pommier, T, and Sausville, E.A **and Senderowicz, A.M*.** Early induction of apoptosis in hematopoietic cell lines after exposure to flavopiridol. Blood 1998 (91): 458-465.
- 15) Jager, W, Zembsch, B, Wolschann, P, Pittenauer, E, **Senderowicz, A.M.**, Sausville, EA, Sedlacek, H, Graf, J, Thalhammer, T. Metabolism of the anticancer drug flavopiridol, a new inhibitor of cyclin dependent kinases, in rat liver. Life Sciences 1998 (62): 1861-1873.
- 16) **Adrian M. Senderowicz***, Donna Headlee, Sherman F. Stinson, Richard M. Lush, Nelson Kalil, Lourdes Villalba, Kimberly Hill, Seth M. Steinberg, William D. Figg, Anne Tompkins, Susan G. Arbuck, and Edward A. Sausville. A Phase I Trial of Continuous Infusion Flavopiridol, a Novel cyclin-dependent kinase inhibitor, in Patients with Refractory Neoplasms. Journal of Clinical Oncology 1998 (16):2986-2999.
- 17) Yu, L, Orlandi, L, Wang, P, Orr, M, **Senderowicz, A.M.**, Sausville, E. A, Silvestrini, R and O'Connor, P. UCN-01 abrogates G2 arrest through a cdc2-dependent pathway that involves inactivation of the Wee1Hu kinase. J. Biol. Chem. 1998 (273), 33455-33464
- 18) Patel, V, **Senderowicz, A.M***, Pinto, D.J, Igishi, T, Ensley, J.F., Sausville, E.A. and Gutkind, J.S. Flavopiridol, a novel cyclin-dependent kinase inhibitor prevents the growth of Head and Neck squamous cell carcinomas by inducing apoptosis. J Clin Invest. 1998 Nov 1;102(9):1674-1681
- 19) Fogt, F, Vortmeyer, A and **Senderowicz, A.M**. Sodium polystyrene sulfonate damage (letter). American Journal of Surgical Pathology 1998, 22:379-381
- 20) Sausville, E. A, Lush, R, Headlee, D, Smith, A, Figg, W, Arbuck, S, **Senderowicz, A. M**, Fuse, E, Tanii, H, Kuwabara, T, Kobayashi, S. Clinical pharmacology of UCN-01: Initial observations and comparison to preclinical models. Cancer Chemother. Pharmacology 1998 (42 suppl) S54-S59
- 21) Fuse, E, Tanii, H, Kurata, N, Kobayashi, H, Shimada, Y, Tamura, T, Sasaki, Y, Tanigara, Y, Lush, R, Headlee, D, Figg, W, Arbuck, S, **Senderowicz, A.M.**, Sausville, E, Akinaga, S, Kuwabara, T and Kobayashi, S. Unpredicted clinical pharmacology of UCN-01 caused by specific binding to human α1-acid glycoprotein. Cancer Research 1998, 58(15):3248-3253
- 22) Zaharevitz, D, Gussio, R, Meijer, L, Leost, M, Kunick, C, **Senderowicz**, **A.M**., Lahusen, T, Kunick, C, and Sausville, E.A. Discovery and initial characterizations of the paullones, a novel class of small-molecule inhibitors of cyclin-dependent kinases. Cancer Research 1999, 59: 2566-2569

23) Lee, H, Chang, T, Tebalt, M, **Senderowicz, A.M.** and Szabo, E. Induction of differentiation accompanies inhibition of cdk2 in a non-small lung cancer cell line. Int J Oncol 1999, 15:161-166

*corresponding author

- 24) Sausville, E.A, Zaharevitz, D, Gussio, R, Meijer, L, Leost, M, Kunick, C, Schultz, R, Lahusen, T, Headlee, D, Stinson, S, Arbuck, SG and **Senderowicz**, **A.M.** Cyclin-dependent kinases: initial approaches to exploit a novel therapeutic target. Pharmacol Ther 1999, 82: 285-292
- 25) **Senderowicz, A.M,** Reid, R, Headlee, D, Horti, J, Lush, R, Dixon, S, Kohler, D, Brawley, O, Reed, E, Figg, W, Sausville, E. A. A Phase II trial of gallium nitrate in patients with androgen-independent metastatic prostate cancer. Urologia Internationalis 1999 63(2):120-125
- 26) Schnier, J, Kaur, G, Kaiser, A, Stinson, S, Sausville, E.A, Gardner, J, Nishi, K, Bradbury, EM and **Senderowicz**, **A. M.** Isolation of flavopiridol-binding proteins by affinity chromatography: Identification of cytosolic aldehyde dehydrogenase I, FEBS letters 1999, 454:100-1049.
- 27) Carlson, B, Lahusen, T, Singh, S, Loaiza-Perez, A., Worland, PJ, Pestell, R., Albanese, C., Sausville, E.A. and **Senderowicz**, **A.M***. Downregulation of cyclin D1 by transcriptional repression in MCF-7 human breast carcinoma cells induced by flavopiridol. Cancer Res 1999, 59; 4634-4641
- 28) Melillo, G, Sausville, EA, Cloud, K, Lahusen, T, Varresio, L and **Senderowicz, AM**. Flavopiridol, a protein kinase inhibitor, down-regulates hypoxic induction of VEGF expression in human monocytes. Cancer Res 1999, 59: 5433-5437.
- 29) **Senderowicz, A.M**. Flavopiridol: the first cyclin-dependent kinase inhibitors in human clinical trials. Investigational New Drugs 1999, 17; 313-320.
- 30) Yiwei Li, Y, Bhuiyan, M, **Senderowicz, A.M**. and Sarkar, FH. Induction of Apoptosis and Inhibition of *c-erb*B-2 in Breast Cancer Cells by flavopiridol. Clin. Cancer Res 2000, 6: 223-229
- 31) Wilson, WH, Sabbaro, L, Figg, W.D, Mont, E., Sausville, E.A, Warren, K. E, Balis, F, Bauer, K, Raffeld, M, **Senderowicz, A.M.**, Monks, A. Modulation of clinical drug resistance in a B-cell lymphoma patient by the protein kinase inhibitor 7-hydroxystaurosporine (UCN-01): presentation of a novel therapeutic paradigm. Clin Cancer Res 2000;6:415-21.
- 32) Richard A. Messmann, Ellen S. Vitetta, Donna Headlee, **Adrian M. Senderowicz**, William D. Figg, John Schindler, Dennis F. Michiel, Steven Creekmore, Seth M. Steinberg, David Kohler, Elaine S. Jaffe, Maryalice Stetler-Stevenson, Huachun Chen, Victor Ghetie, Edward A. Sausville. A Phase I Study Of Combination Therapy With Immunotoxins IgG-HD37-dgA and IgG-RFB4-dgA (Combotox) In Patients With Refractory CD19(+), CD22(+) B-Cell Lymphoma. Clin Cancer Res 2000 Apr;6:1302-13.

33) Sandor V, **Senderowicz A**, Mertins S, Sackett D, Sausville E, Blagosklonny, MV, Bates SE P21-dependent G(1)arrest with downregulation of cyclin D1 and upregulation of cyclin E by the histone deacetylase inhibitor FR901228. Br J Cancer 2000 Sep;83(6):817-825

*corresponding author

- 34) **Senderowicz, A.M.** *and Sausville, E.A. Preclinical and clinical development of cyclin-dependent kinase inhibitors. Journal of the National Cancer Institute 2000, 92: 6-17
- 35) Chao, S, Fujinaga, K, Marion, J, Taube, R, Sausville, E, **Senderowicz, A.M***, Peterlin B and Price, D. Flavopiridol inhibits P-TEFb and blocks HIV replication. J Biol Chem. 2000 Sep 15;275(37):28345-28348
- 36) Sausville, E, Johnson, J, Alley, M, Zaharevitz, D and **Senderowicz, A. M**. Inhibition of cdks as a therapeutic modality. Ann N Y Acad Sci. 2000 Jun;910:207-21
- 37) Li Y, Chinni SR, **Senderowicz AM**, Sarkar FH. Induction of growth inhibition and apoptosis in prostate cancer cells by flavopiridol. Int J Oncol. 2000 Oct;17(4):755-759.
- 38) Leost, M, Schultz, C, Wu, Y, Biernat, J, Mandelkow, E, Bibb, J, Snyder, G, Greengard, P, Zaharevitz, D, Gussio, R, **Senderowicz, A.M.,** Sausville, E.A, Kunick, C and Meijer, L. Paullones are potent inhibitors of glycogen sythase kinase-3 β and cyclin-dependent kinase 5/p25. Eur. J. Bioch. 2000;267(19):5983-94.
- 39) Overexpression of the ATP-binding cassette half-transporter, ABCG2 (MXR/BCRP/ABCP1), I flavopiridol-resistant human breast cancer cells. Robert W. Robey, R., Medina-Pérez, W, Nishiyama, K, Lahusen, T, Miyake, K, Litman, T, **Senderowicz, A.M.**, Ross, D and Bates, S. Clin Cancer Res 2001; 7: 145-152
- 40) Kahn, M, **Senderowicz, A**, Sausville, E, Barret, K. Possible mechanisms of diarrhea side-effects associated with the use of a novel chemotherapeutic agent, flavopiridol. Clin Cancer Res. 2001 Feb;7(2):343-9.
- 41) **Senderowicz, A.M.** Development of cyclin-dependent kinase modulators as novel therapeutic approaches for hematological malignancies. Leukemia 2001; 15:1-9
- 42) **Senderowicz, A.M.** Small Molecule Modulators of Cyclin-dependent kinases for cancer therapy. Oncogene (19): 6600, 2000.
- 43) Chen, H, Bauer, K, **Senderowicz, A**, Messmann, R, Headlee, D, Arbuck, S, Kuwabara, T, Venzon, D, Murgo, A, Sausville, E.A, Figg, W. Incorporation of Alpha 1 acid glycoprotein biding affinity for predicting Pharmacokinetics of UCN-01, a novel anticancer agent. Clin Pharmacol Ther (in press).
- 44) Sausville, EA, Arbuck, SG, Messmann, R, Headlee, D, Bauer, K, Lush, R, Murgo, A, Figg, W, Lahusen, T, Jaken, S, Jing, X, Roberge, M, Fuse, E, Kuwabara, T and **Senderowicz, A.M.**

Phase I trial of 72-hour continuous infusion UCN-01 (7-hydroxystaurosporine) in patients with refractory neoplasms. J Clin Oncol 2001 Apr 15;19(8):2319-33.

*corresponding author

- 45) B. Hagenauer, B, Salamon, A, Thalhammer, T, Kunert, O, Haslinger, E, Klinger, P, **Senderowicz, A.M**, Sausville and E.A Jäger, W. In vitro glucuronidation of the cyclindependent kinase inhibitor flavopiridol by rat and human liver microsomes: involvement of UDP-glucuronosyltransferases 1A1 and 1A9". Drug Metab Dispos. 2001 Apr; 29(4 Pt 1):407-14
- 46) Bachrich T, Thalhammer T, Jager W, Haslmayer P, Alihodzic B, Bakos S, Hitchman E, **Senderowicz AM**, Penner E. Characterization of autoantibodies against uridine-diphosphate glucuronosyltransferase in patients with inflammatory liver diseases. Hepatology 2001 May; 33(5):1053-9.
- 47) Politi, PM and **Senderowicz, A.M*.** Report: First Symposium of Novel Molecular Targets for Cancer Therapy, Buenos Aires, Argentina. The oncologist 2001; 6(2): 207-12
- 48) Wang, C, Fu, M, Mani, S, Wadler, S, **Senderowicz, A.M** and Pestell, R. Histone acetylation and the cell cycle in cancer. Frontiers in Bioscience 2001; 6: d610-629
- 49) Perifosine, a Novel Alkylphospholipid Induces p21^{WAF1} Expression in Squamous Carcinoma Cells Through a p53-Independent Pathway Leading to Loss in Cdk Activity and Cell Cycle Arrest. Patel , V, Lahusen T, Sy, T, Sausville, E A , Gutkind, J. S and **Senderowicz, A.M *.** Cancer Research 2002; (62), 1401–1409.
- 50) Lush, R, Stinson, S, **Senderowicz, A.M.**, Headlee, D, Hill, K, Arbuck, S, Feuer, J, Murgo, A, Sausville, E, Figg, W. Flavopiridol pharmacokinetics suggest enterohepatic circulation. Cancer (in press)
- 51) Patel, V; Lahusen, T; Leethanakul, C; Kremer, C; Quintanilla-Martinez, L; Ensley, J; Sausville, EA, Gutkind, JS and **Senderowicz, A.M***. Antitumor activity of UCN-01 in carcinomas of the head and neck is associated with altered expression of cyclin D3 and p27^{KIP1} Clin Cancer Res (in press).
- 52) Antoinette R. Tan, Richard Messmann, Edward A. Sausville, Donna Headlee, Susan G. Arbuck, Anthony Murgo, Giovanni Melillo, Suoping Zhai, William D. Figg, Sandra M. Swain, and **Adrian M. Senderowicz***. Phase I Clinical and Pharmacokinetic Study of Flavopiridol Administered as a Daily 1-Hour Infusion in Patients with Advanced Neoplasms. Journal of Clinical Oncology 2002 (20), 4074-4082.
- 53) Richard A. Messmann, Claudio Dansky Ullmann, Tyler Lahusen, Audrey Kalehua, Jason Wasfy, Giovanni Melillo, Ivan Ding, Donna Headlee, William D. Figg, Edward A. Sausville and Adrian M. Senderowicz*. Flavopiridol-induced pro-inflammatory syndrome is associated with induction of interleukin-6 from bone marrow cells. Clin Cancer Res (in press)